a7 wel. length clone. When compared to the genomic sequence, the splice variant is lacking a complete exon. The reading frame, however, is not maintained in this shorter version, and so the translated protein is different after the unspliced exon.

REMARKS

The amendments to the specification have been made to reflect the Sequence
Listing being submitted herewith. No new matter has been introduced by the above-made
amendments. Applicants respectfully request entry of the amendments and remarks herein into
the file history of the subject application.

Respectfully submitted,

Date April 30, 2002

30,742

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Enclosures



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MARKED-UP VERSION OF AMENDED PARAGRAPHS IN THE SPECIFICATION

U.S. PATENT APPLICATION SERIAL NO. 10/014,340

(ATTORNEY DOCKET 9195-078)

On page 5, line 3, please amend the paragraph beginning "Figure 2" as follows:

Figure 2 shows nucleic acid sequence of ADPI-41 (<u>SEQ ID NO.: 820</u>, Figure 2a) and the corresponding amino acid sequence (<u>SEQ ID NO.: 821</u>, Figure 2b) where the tryptic peptides identified by mass spectrometry are underlined, and the conserved motifs are in italics;

On page 5, line 6, please amend the paragraph beginning "Figure 3" as follows:

Figure 3 shows the nucleic acid sequence (<u>SEQ ID NO.: 822</u>, Figure 3a) and the corresponding amino acid sequence (<u>SEQ ID NO.: 823</u>, Figure 3b) of the splice variant identified for ADPI-41. The protein sequence (Figure 3b) shows in bold the amino acids unique to this clone, the tryptic digest peptides identified by mass spectroscopy are underlined and the conserved motifs are in italics; and

On page 5, line 11, please amend the paragraph beginning "Figure 4 as follows:

Figure 4 is a flow chart depicting the characterization of a Feature and relationship of a Feature and Protein Isoform (SEQ ID NO.: 427, SEQ ID NO.: 154, SEQ ID NO.: 266, SEQ ID NO.: 561, SEQ ID NO.: 589, SEQ ID NO.: 365, SEQ ID NO.: 611, SEQ ID NO.: 708). A Feature may be further characterized as or by a Protein Isoform having a particular peptide sequence associated with its pI and MW. As depicted herein, a Feature may comprise one or more Protein Isoform(s), which have indistinguishable pI and MWs using the Preferred Technology, but which have distinct peptide sequences. The peptide sequence of the Protein Isoform can be utilized to search database(s) for previously identified proteins comprising such peptide sequence. In some instances, it can be ascertained whether a commercially

available antibody exists which may recognize the previously-identified protein and/or a variant thereof. It should be noted that the ADPI may either correspond to the previously-identified protein, or be a variant of the previously-identified protein.

On page 236, line 17, please amend the paragraph beginning "BE298534" as follows:

BE298534, AI014241, and AV655958: NILLTNEQLESAR. (SEQ ID NO.: 568)
AA568689, AW796078, AA782417: QAITQVVVSR. (SEQ ID NO.: 594)
BF126487, BG388906, BG577432: VGIPVTDENGNR (SEQ ID NO.: 737)

On page 237, line 5, please amend the paragraph beginning "ADPI 41 was" as follows:

ADPI 41 was cloned ([SEQ ID No. 753] <u>SEQ ID NO.: 822</u>, shown in Figure 2a and [SEQ ID No.748] <u>SEQ ID NO.: 823</u>, shown in Figure 2b) using the following primers:

Sense (F1) - 5' actgagegggaeetgegage 3' [(SEQ ID NO: 755)] (SEQ ID NO.: 817)

Antisense (R1) - 5' tccgtaactgggagaacccagg 3' [(SEQ ID NO: 780)] (SEQ ID NO: 818)

On page 237, line 11, please amend the paragraph beginning "The DNA" as follows:

The DNA sequences encoding two of the identified peptides are as follows:

aac att etg tta acc aac gaa caa ctc gag agt gcg aga [(SEQ ID NO: 751)] (SEQ ID NO: 20)

Asn Ile Leu Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg (SEQ ID NC: 568)

and

caa gcc atc acg caa gtt gtc gtg tcc agg [(SEQ ID NO: 752)] (SEQ ID NO: 819) Gln Ala Ile Thr Gln Val Val Ser Arg (SEQ ID NO: 594)

On page 237, line 21, please amend the paragraph beginning "ESTs AV655958" as follows:

(ESTs AV655958 and AV655932 respectively) suggest there is a splice variant that lacks amino acids 65-82 when translated. These ESTs are both from a liver library. Using the primers described above, a splice variant was amplified from both brain and liver ([SEQ ID No. 754] SEQ ID No. 822 shown in Figure 3a and [SEQ ID No. 749] SEQ ID No.: 823 shown in Figure 3b), in addition to the full-length clone. When compared to the genomic sequence, the splice variant is lacking a complete exon. The reading frame, however, is not maintained in this shorter version, and so the translated protein is different after the unspliced exon.